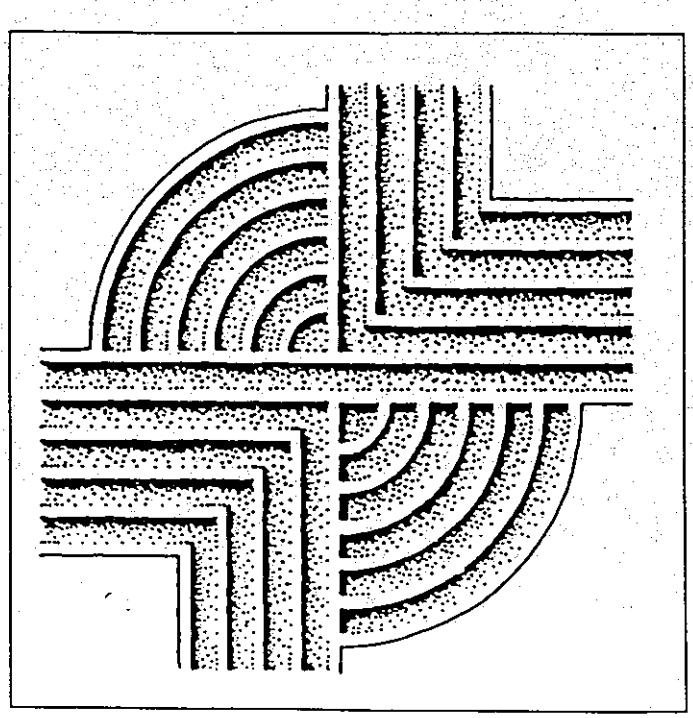
# CULTURAL RESOURCES SURVEY OF THE WESTVACO TRACT IN COLLETON COUNTY, SOUTH CAROLINA



CHICORA RESEARCH CONTRIBUTION 330

# CULTURAL RESOURCES SURVEY OF THE WESTVACO TRACT IN COLLETON COUNTY, SOUTH CAROLINA

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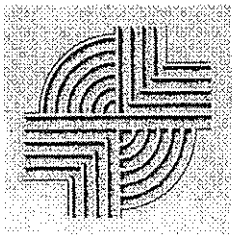

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# ABSTRACT

This study reports on an intensive archaeological survey of 200 acres in the eastern portion of Colleton County, South Carolina. The work was conducted to assist A.M. Jacobs, Inc. comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The tract is to be used by A.M. Jacobs, Inc. for the construction of an industrial park. The survey area is situated north of Walterboro on I-95. Access to the tract is off S-34 and Three Mile Road. It consists of dense forests of pine and hardwood mixed with wetland areas interspersed throughout the entire tract. The 200 acre tract is located in a low, but level area, with man-made trenches throughout the area, causing a hilly terrain.

The eastern and western sections of the tract are divided by an access road which runs the entire length of the survey area from north to south. Part of the road closer to the wetland was prone to the overflow from the wetland, thus making the area consistently muddy. Several wetland areas were interspersed among pine forests and mixed brush which has grown since recent logging removed much of the original growth in recent years.

This survey was conducted to identify and assess archaeological and historical sites which may be in the project domain. For this study an area of potential effect (APE) 1.0 mile around the proposed tract was assumed. The proposed undertaking will require clearing, grubbing, and grading, along with the construction of both underground utilities as well as industrial structures. There will likely be short-term construction impacts, including increased noise and dust levels, and increased construction related traffic. The long-term affects will primarily be limited to the study tract itself, although there is potential for visual intrusion of nearby properties.

Consultation with the S.C. Department of Archives and History revealed no National Register properties in the APE, but two historical architectural sites (440534 and 440533) were recorded from a 1992 architectural survey of Colleton County, performed by the Jaeger Company. Site 440533 is a ca. 1907 house and 440534 is the ca. 1860 Ireland Creek Cemetery. Both historical sites have been determined not eligible for inclusion on the National Register. Additional survey in the APE failed to yield any additional structures over 50 years old which retained their integrity. An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology identified no archaeological sites within the APE.

The archaeological survey of the tract incorporated shovel testing at 100-foot intervals on transects laid out at 100-foot intervals. All shovel test fill was screened through ¼-inch mesh and the shovel tests were backfilled at the completion of the study. The tests which produced mud were not screened, but visually scanned for artifacts. In the areas covered with standing water, no shovel tests were performed, but a pedestrian survey was still completed. A total of 848 shovel tests were excavated along 36 transect lines. As a result of these investigations, no archaeological sites were uncovered.

It is possible that archaeological remains may be encountered in the corridor during construction. Construction crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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# INTRODUCTION

This intensive archaeological survey of a wooded development tract for A.M. Jacobs, Inc. in Ravenel, South Carolina was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Bret Davis of A.M. Jacobs, Inc. The work was conducted to assist A.M. Jacobs, Inc. comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The project site consists of a tract measuring about 200 acres of logged land once belonging to Westvaco, situated in eastern Colleton County northeast of Walterboro, off I-95 (Figure 1). The project site consists of a roughly square parcel measuring about 3,000 feet on its sides. To the north is S-34, to the east side is Three Mile Road, while to the west is marked by I-95 (Figure 2). The southern boundary is a dirt road which separates the survey tract from another parcel of land.

The survey area is generally level, although there are a variety of low areas which gather standing water — evident during the current survey. The largest wetland area is located in the central portion of the survey tract, where the access road connects S-34 and the dirt road on the southern edge of the tract. The forested area is a dense second growth of pine and mixed hardwoods with herbaceous underbrush. The nearest permanent water is Allen Creek, located about 1,000 feet north of the property.

The survey area is intended to be used as a location for an industrial park. Landscape alteration, primarily clearing, grubbing, and grading, as well as the construction of underground utilities (such as storm water drainage, water, and electricity), and the construction of parking areas and the industrial center, will cause severe damage to the ground surface and any archaeological resources which may be present in the survey area.

Construction, operation, and maintenance of the facility may also have an impact on historic resources in the project area. The project will not directly effect any historic structures (since none are located on the parcel), but the completed facility may detract from the visual integrity of historic properties, creating what many consider discordant surroundings. As a result, this architectural survey uses an area of potential effect (APE) about 1.0 mile radius around the proposed survey tract.

This study, however, does **not** consider any future secondary impact of the project, including increased or expanded industrial development. Nor does this study examine utility development which may be necessary to service the facility.

We were requested on March 20, 2001 to conduct a cultural resources survey on the tract by Mr. Bret Davis of A.M. Jacobs, Inc., and permission to proceed with the project was given on April 3. Investigations for the survey area incorporated a review of the site files at the South Carolina Institute of Archaeology and Anthropology. No previously identified archaeological sites were identified during this background examination.

In addition, the master topographic maps at the South Carolina Department of Archives and History were checked to locate any National Register of Historic Places (NRHP) buildings, districts, structures, sites, or objects, or structures surveys in the study area. There are no NRHP properties, but two historical sites were found within the APE. Structure 440533 is a ca. 1907 house and 440534 is a cemetery dating to about. 1860. Both of these sites have been determined not eligible by the State Historic Preservation Office (SHPO).

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files, as well as research at the South Caroliniana Library and the Thomas Cooper Map


Figure 1. Project vicinity in Florence County (basemap is USGS South Carolina 1:500,000).

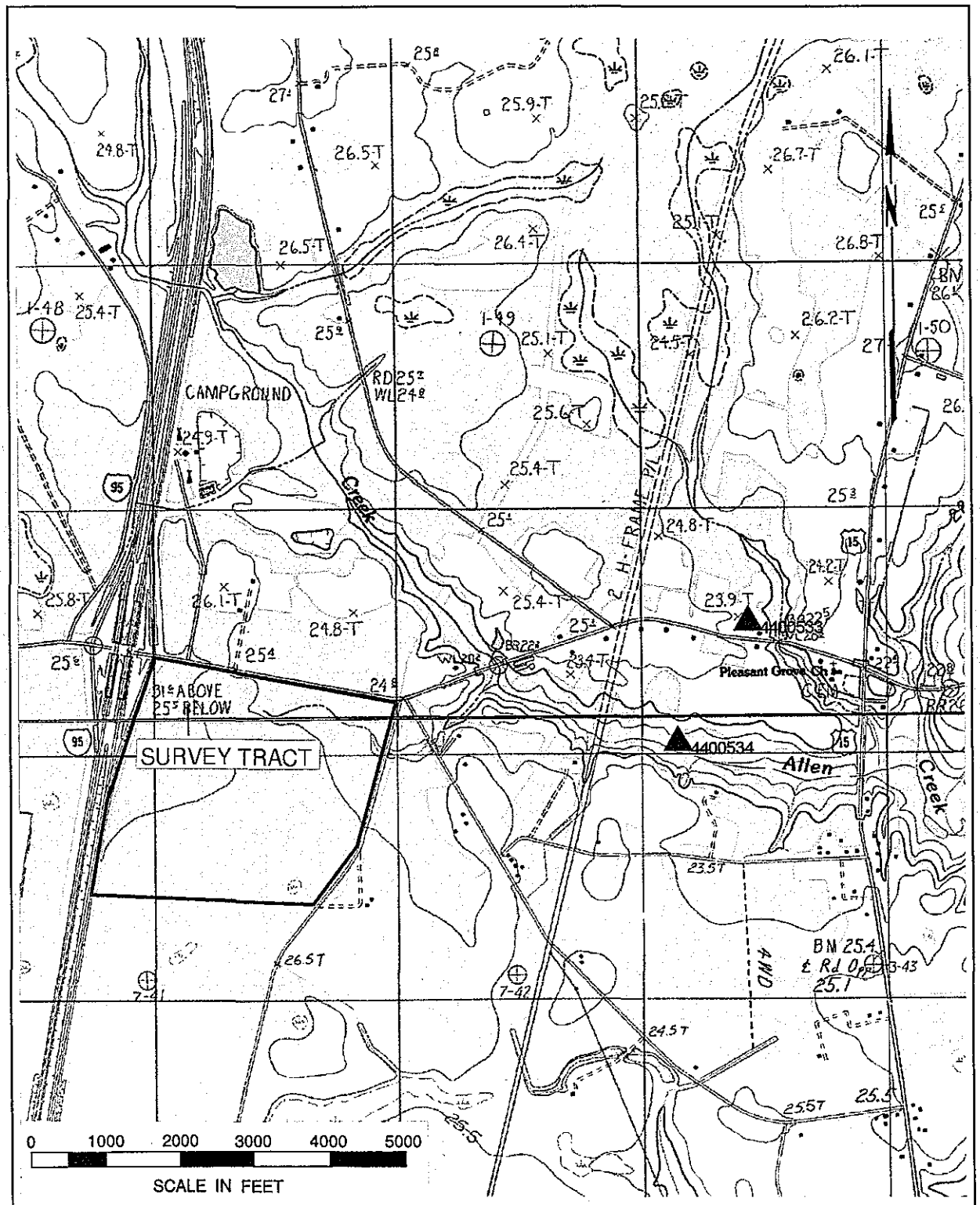


Figure 2. Project tract and previous architectural sites (basemap is USGS Johnsonville 7.5').

Repository.

The archaeological survey was conducted from April 16-20 by Ms. Nicole Southerland and Mr. Tom Covington. The survey revealed no previously unrecorded archaeological sites.

The architectural survey of the area, designed to review and validate the findings of the previous county-wide survey as well as to determine if there were additional historic sites in the APE, was conducted on April 20. The previously recorded architectural sites were the only ones identified and we concur with the previous assessment of not eligible for both sites.

Laboratory work and report production were conducted at Chicora's laboratories in Columbia, South Carolina from April 23-27.

# NATURAL SETTING

## Physiographic Setting

Colleton County is situated in the lower Atlantic Coastal Plain of South Carolina. Containing about 1,048 square miles (excluding recently annexed Edisto Beach), it is bordered by Charleston, Dorchester, Orangeburg, Bamburg, Allendale, and Hampton counties to the north, east, and west. It is bounded on the south and east by approximately 4 miles of irregular Atlantic Ocean shoreline, as well as a number of barrier and marsh islands.

The topography of the county is characterized by subtle undulation characteristic of beach ridge plains. The elevations range from sea level to approximately 125 feet above mean sea level (AMSL). The survey tract had a relatively level topography with an elevation of about 25 feet AMSL.

Colleton is drained by three significant river systems: the Edisto (historically the upper reaches have been known as Pon Pon River), the Ashepoo, and the Combahee-Salkahatchie. All three rivers have significant freshwater discharge although the Ashepoo is dominated by salt water as far upriver as Lavington Plantation (about 19 miles inland) and the point of maximum brackish water penetration is in the vicinity of the Ashepoo community. The Combahee River forms the southwestern boundary of the county while the Edisto forms part of the northern boundary. The Ashepoo River bisects Colleton County, flowing just west of the City of Walterboro. Jones Swamp, just west of the survey tract, flows southerly, making up the headwaters of the Ashepoo. Just to the northeast of the tract, Allen Creek flows southeasterly, while a small, intermittent tributary is found within the northeast edge of the tract and flowing eastwardly into Allen Creek. While the survey area is generally low and level, there are few well defined drainages in the immediate area.

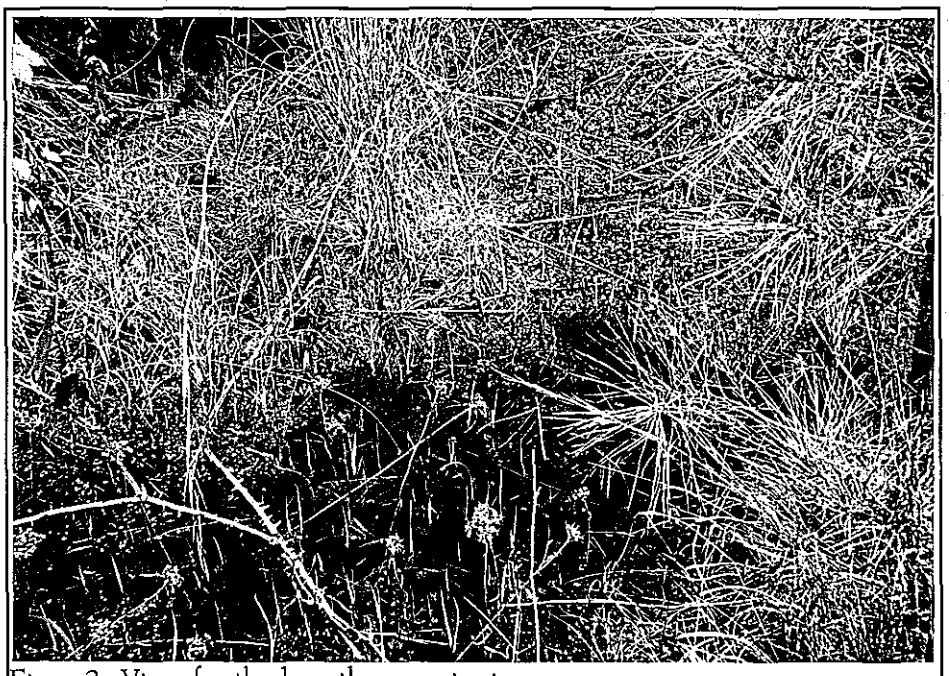

Figure 3. View of wetlands on the survey tract.

Both Allen Creek and the small unnamed drainage are classified as broad, low-gradient interior drainages. They are typical of the flooded bays and swales which make up much of the low country's flatwoods topography (Figure 3).

## Geology and Soils

As previously mentioned, Colleton County is made up of one broad physiographic area, often called the lower Atlantic Coastal Plain or the Atlantic Coast Flatwoods. The surface

soils are almost entirely sedimentary and were transported into the area from elsewhere. The geology of Colleton County is characteristic of the region; the formations covering the surface date from the Pleistocene and include sands, clays, gravels, and phosphates.

Much of the county is covered with broad areas of nearly level to gently sloping loamy to clayey soils. On the flood plains these soils are usually subjected to at least occasional, and often frequent, flooding. Many exhibit wet season high water tables — often within a foot of the surface. Major soil series include Bladen, Argent, Wahee, Santee, and Cape Fear. Just southeast of Walterboro the soils become a little lighter, and are characterized by loamy profiles. Typical soil series include Goldsboro, Lynchburg, Rains, and Coosaw. Although many of these soils have water tables 2 or more feet below the surface, the Rains and Coosaw soils are still likely to be wet during much of the year. At Walterboro there is a band of primarily sandy soils crossing the county from southwest to northeast. Included are such series as Blanton, Chipley, and Lakeland — all exhibiting good to excessive drainage (Stuck 1982).

Two broad soil associations encompass the survey area: Goldsboro-Lynchburg-Rains and Lynchburg-Rains-Paxville. Both associations are typical of dominantly loamy soils. Goldsboro-Lynchburg-Rains soils are moderately well drained to poorly drained soils with a loamy subsoil which occur on level ridges and in depressions, but are more poorly drained.

The single most common soil in the corridor is Rains sandy loam. This soil, found in broad low areas and slight depressions, has an A1 horizon of very dark gray (10YR3/1) sandy loam to about 0.4 foot, under which is a light brownish gray (10YR6/2) sandy loam to about 0.8 feet. Below this the B2 horizon soils are gray (10YR5/1) sandy clay loams.

Next in frequency are the Lynchburg soils, typically found on upland areas. These soils have an Ap horizon of dark gray (10YR4/1) loamy fine sand about 0.5 foot in depth overlying a yellowish brown (10YR5/4) loamy fine sand to 0.8 foot. Below this is a B horizon of yellowish brown (10YR5/4) sandy clay loam which may occur to a depth of 1.4 feet.

Less common on the survey tract are Paxville soils which occur in low areas and poorly defined drainageways. This soil has an A1 horizon of a black (10YR2/1) fine sandy loam to just over a foot over a very dark gray (10YR3/1) fine sandy loam to a depth of 1.5 feet. The B horizon consists of a dark gray (10YR4/1) sandy clay loam which may exists to a depth

Figure 4. Various pines and hardwoods on the survey tract.

of 5.0 feet.

Also found in the survey area are Ocilla soils. These soils are formed in sandy and loamy sediments in broad flat areas. The Ap horizon consists of a dark gray (10YR4/1) loamy sand to 0.8 foot over a pale brown (10YR6/3) loamy sand to a depth of 1.5 feet. The B1 horizon is a light yellowish brown (10YR6/4) sandy loam to a depth of 3.7 feet.

The least common soil type found on the tract is the Goldsboro series which occur on the higher elevations or upland areas. These soils have an Ap horizon of grayish brown (10YR5/2) loamy fine sand to 0.6 foot over a light yellowish brown (2.5YR6/4) loamy fine sand to just over a foot. The B1 horizon consists of a brownish yellow (10YR6/6) fine sandy loam to a depth of 1.4 feet.

## Climate

Colleton County has a subtropical climate, characterized by warm summers, mild winters, and adequate precipitation fairly evenly spread throughout the year. Except in the summer, when maritime tropical air controls the climate of the area, the daily weather patterns are controlled by west to east moving pressure systems and associated fronts.

Yearly precipitation averages 52 inches, but ranges from 41 to 62 inches. The growing season, from April to September, receives an average of 32 inches or about 60% of the yearly total. The average length of the freeze-free growing season is approximately 200 days, although frosts can occur as early as October 19 and as late as April 20 (Stuck 1982:2, Table 2).

Mills remarked in 1826 that Carolina was similar to European climates, lying at a similar latitude. He noted that:

> in comparing the climate of South Carolina, with similar climates in Europe, we find it lying under the same atmospheric influences with Aix, Rochelle, Montpelier, Lyons, Bordeaux, and other parts of France; with Milan, Turin, Padua, Mantua, and other parts of Italy (Mills 1972 [1826]:133).

The coastal region is a moderately high risk zone for tropical storms, with 169 hurricanes being documented from 1686 to 1972 (0.59 per year) (Mathews et al. 1980:56). One of the most devastating in the eighteenth century was the hurricane of September 15, 1752. One report listed 92 people drowned, although the death toll, especially among the African American slaves was likely much higher. The storm also had considerable long-term effects and Calhoun notes that:

> the destruction of trees was severe; one plantation owner's loss was assessed at $50,000 and many of those trees which survived were "heart-shaken," and unfit for use. Crops were even more damaged as the storm followed a severe drought. It was necessary to enact laws to regulate the exportation and sale of corn, "Peafe," and small rice, so that "the poor may be able to purchase Provisions at a moderate Price" (Calhoun 1983:9).

## Floristics

Speaking of the coastal plain Braun observed that:

> the vegetation of this region is in part warm temperate-subtropical, in part distinctively coastal plain, and in part temperate deciduous. It is made up of widely different forest communities — coniferous, mixed coniferous and hardwood, deciduous hardwood, and mixed deciduous and broad-leaved evergreen hardwood — interrupted here and there by swamps, bogs, and prairies. The large number of unlike communities is related to the diverse environmental conditions of the region (Braun 1974:282)

Figure 5. Planted pines on survey tract.

Indeed, an examination of the region reveals tremendous diversity. Being within the Atlantic Coast Flatwoods, the predominant extant vegetation is pine, often a mixture of pond pine, longleaf pine, and slash pine, with oak, sweet bay magnolia, red bay, and sassafras in the understory, especially in depressional or poorly drained areas (Figure 4). In the lowest areas, flooded for most of the year, the vegetation consists of cypress-tupelo swamps. On the fringe areas, where flooding is more seasonal, a range of somewhat drier species are found, including red maple and water elm, as well as cottonwood and sycamore. Understory in these areas consists of red bay, sweet-bay magnolia, and American elm (see Barry 1980).

Today much of area, both wet and dry, has been devoted to planted pines (Figure 5). In the drier areas the pines may be found with an understory of scrub hardwoods, especially if the plots are not aggressively fire managed. In the wetter areas the ground is often prepared by creating ridges upwards of 1.5 feet higher than the intervening troughs, on which the pine seedings are planted. The mounding of the soil serves to keep their roots drier, although this practice also seriously damages any archaeological sites that may be present. In fact, the inherently wet soils, combined with this silvaculture practice, strongly suggests that intensive archaeological survey in such areas is not cost-effective.

The survey tract rarely exhibit any trees older than about 50 to 75 years — documenting the extensive logging which took place during the early to mid-twentieth century. Many of these areas also exhibit the swamp vegetation which took over the swamp rice fields cleared during the eighteenth and early nineteenth centuries.

# PREHISTORIC AND HISTORIC BACKGROUND

## The Prehistoric

The Paleoindian period, lasting from 12,000 to 8,000 B.C., is evidenced by basally thinned, side-notched projectile points; fluted, lanceolate projectile points, side scrapers, end scrapers; and drills (Coe 1964; Michie 1977; Williams 1968). The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented towards the exploitation of now extinct mega-fauna" (Michie 1977:124).

Unfortunately, little is known about Paleoindian subsistence strategies, settlement systems, or social organization. Generally, archaeologists agree that the Paleoindian groups were at a band level of society (see Service 1966), were nomadic, and were both hunters and foragers. While population density, based on the isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

The Archaic period, which dates from 8000 to 2000 B.C., does not form a sharp break with the Paleoindian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited mammal. The chronology established by Coe (1964) for the North Carolina Piedmont may be applied with little modification to the South Carolina coastal plain and piedmont. Archaic period assemblages, exemplified by corner-notched and broad-stem projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

In the Coastal Plain of the South Carolina there is an increase in the quantity of Early Archaic remains, probably associated with an increase in population and associated increase in the intensity of occupation. While Hardaway and Dalton points are typically found as isolated specimens along riverine environments, remains from the following Palmer phase are not only more common, but are also found in both riverine and interriverine settings. Kirks are likewise common in the coastal plain (Goodyear et al. 1979).

The two primary Middle Archaic phases found in the coastal plain are the Morrow Mountain and Guilford (the Stanly and Halifax complexes identified by Coe are rarely encountered). Our best information on the Middle Woodland comes from sites investigated west of the Appalachian Mountains, such as the work in the Little Tennessee River Valley. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and South Carolina, where axes, choppers, and ground and polished stone tools are very rare.

The Late Archaic is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued the intensive exploitation of the uplands much like earlier Archaic groups. The bulk of our data for this period, however, comes from work in the Uwharrie region of North Carolina.

The Woodland period begins by definition with the introduction of fired clay pottery about 2000 B.C. along the South Carolina coast (the introduction of pottery, and hence the beginning of the Woodland period, occurs much later in the Piedmont of South Carolina). It should be noted that many researchers call the period from about 2500 to 1000 B.C. the Late Archaic because of a perceived continuation of the Archaic lifestyle in spite of the manufacture of pottery.

Regardless of terminology, the period from 2500 to 1000 B.C. is well documented on the South Carolina coast and is characterized by Stallings (fiber-tempered) pottery. The subsistence economy during this early period was based primarily on deer hunting and fishing, with supplemental inclusions of small mammals, birds, reptiles, and shellfish.

Like the Stallings settlement pattern, Thom's Creek sites are found in a variety of environmental zones and take on several forms. Thom's Creek sites are found throughout the South Carolina Coastal Zone, Coastal Plain, and up to the Fall Line. The sites are found into the North Carolina Coastal Plain, but do not appear to extend southward into Georgia.

In the Coastal Plain drainage of the Savannah River there is a change of settlement, and probably subsistence, away from the riverine focus found in the Stallings Phase (Hanson 1982:13; Stoltman 1974:235-236). Thom's Creek sites are more commonly found in the upland areas and lack evidence of intensive shellfish collection. In the Coastal Zone large, irregular shell middens, small, sparse shell middens; and large "shell rings" are found in the Thom's Creek settlement system.

The Deptford phase, which dates from 1100 B.C. to A.D. 600, is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves both coastal and inland sites.

Inland, sites such as 38AK228-W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Coastal Plain, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979; Ryan 1972; Trinkley 1980b). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but also in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the Lewis-West site (38AK228-W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary behavior, and craft specialization has been reported (Sassaman et al. 1990:96-98).

Throughout much of the Coastal Zone and Coastal Plain north of Charleston, a somewhat different cultural manifestation is observed, related to the "Northern Tradition" (e.g., Caldwell 1958). This recently identified assemblage has been termed Deep Creek and was first identified from northern North Carolina sites (Phelps 1983). The Deep Creek assemblage is characterized by pottery with medium to coarse sand inclusions and surface treatments of cord marking, fabric impressing, simple stamping, and net impressing. Much of this material has been previously designated as the Middle Woodland "Cape Fear" pottery originally typed by South (1976). The Deep Creek wares date from about 1000 B.C. to A.D. 1 in North Carolina, but may date later in South Carolina. The Deep Creek settlement and subsistence systems are poorly known, but appear to be very similar to those identified with the Deptford phase.

The Deep Creek assemblage strongly resembles Deptford both typologically and temporally. It appears this northern tradition of cord and fabric impressions was introduced and gradually accepted by indigenous South Carolina populations. During this time some groups continued making only the older carved paddle-stamped pottery, while others mixed the two styles, and still others (and later all) made exclusively cord and fabric stamped wares.

The Middle Woodland in South Carolina is characterized by a pattern of settlement mobility and short-term occupation. On the southern coast it is associated with the Wilmington phase, while on the northern coast it is recognized by the presence of Hanover, McClellanville or Santee, and Mount Pleasant assemblages. The best data concerning Middle Woodland Coastal Zone assemblages comes from Phelps' (1983:32-33) work in North Carolina. Associated items include a small variety of the Roanoke Large Triangular points (Coe 1964:110-111), sandstone abraders, shell pendants, polished stone gorgets, celts, and woven marsh mats. Significantly, both primary inhumations and cremations are found.

On the Coastal Plain of South Carolina, researchers are finding evidence of a Middle Woodland

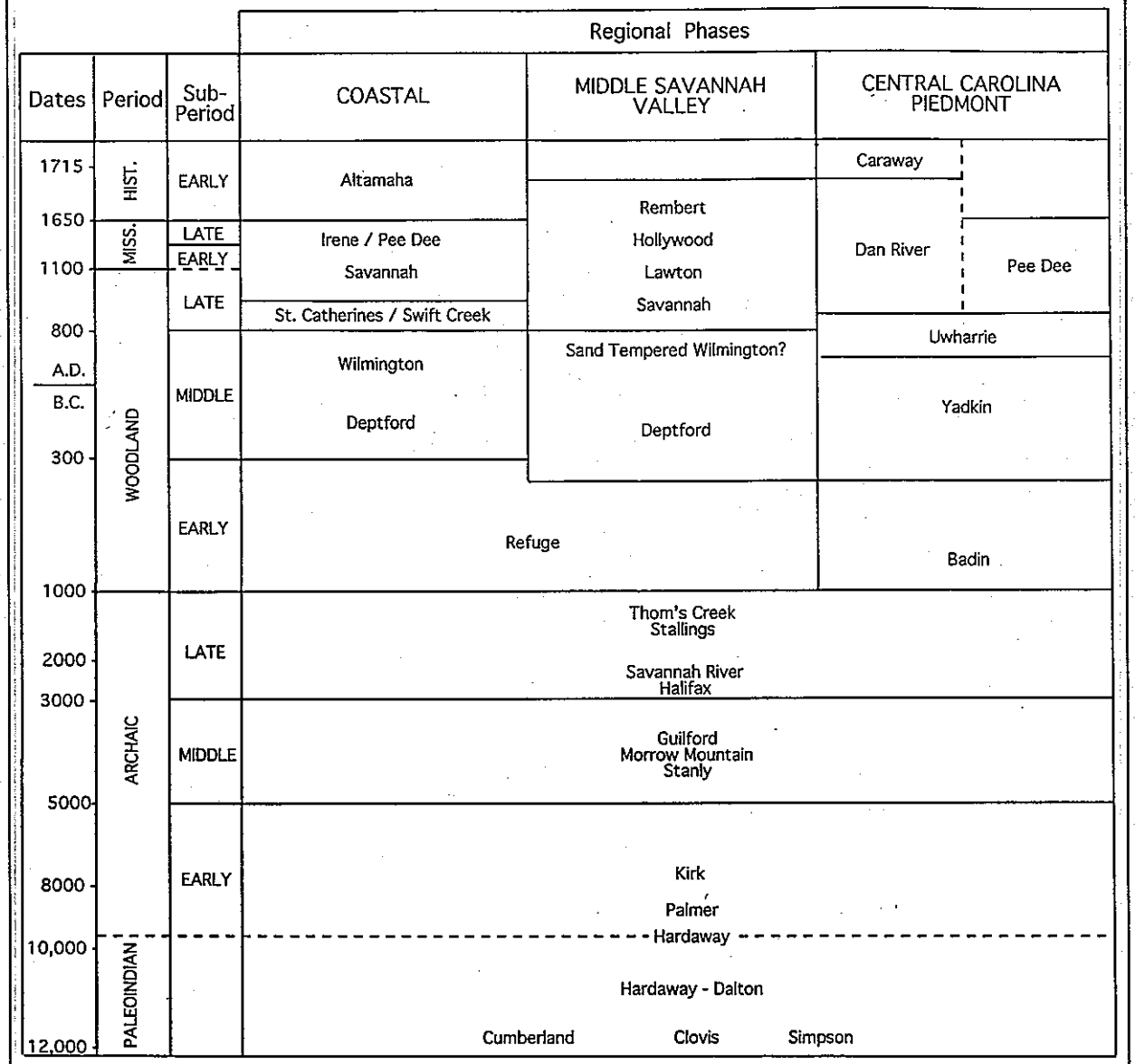


Figure 6. Generalized cultural periods for South Carolina.

Yadkin assemblage, best known from Coe's work at the Doerschuk site in North Carolina (Coe 1964:25-26). Yadkin pottery is characterized by a crushed quartz temper and cord marked, fabric impressed, and linear check stamped surface treatments. The Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least A.D. 300 coexisted with this Triangular Tradition. The Yadkin series in South Carolina was first observed by Ward (1978, 1983) from the White's Creek drainage in Marlboro County, South Carolina. Since then, a large Yadkin village has been identified by DePratter at the Dunlap site (38DA66) in Darlington County, South Carolina (Chester DePratter, personal communication 1985) and Blanton et al. (1986) have excavated a small Yadkin site (38SU83) in Sumter County, South Carolina. Research at 38FL249 on the Roche Carolina tract in northern Florence County revealed an assemblage including Badin, Yadkin, and Wilmington wares (Trinkley et al. 1993:85-102). Anderson et al. (1982:299-302) offer additional typological assessments of the Yadkin wares in South Carolina.

Over the years the suggestion that Cape Fear might be replaced by such types as Deep Creek and Mount Pleasant has raised considerable controversy. Taylor, for example, rejects the use of the North Carolina types in favor of those developed by Anderson et al. (1982) from their work at Mattassee Lake in Berkeley County (Taylor 1984:80). Cable (1991) is even less generous in his denouncement of ceramic constructs developed nearly a decade ago, also favoring adoption of the Mattassee Lake typology and chronology. This construct, recognizing five phases (Deptford I - III, McClellanville, and Santee I), uses a type variety system.

Regardless of terminology, these Middle Woodland Coastal Plain and Coastal Zone phases continue the Early Woodland Deptford pattern of mobility. While sites are found all along the coast and inland to the Fall Line, shell midden sites evidence sparse shell and artifacts. Gone are the abundant shell tools, worked bone items, and clay balls. Recent investigations at Coastal Zone sites such as 38BU747 and 38BU1214, however, have provided some evidence of worked bone and shell items at Deptford phase middens (see Trinkley 1990).

In many respects the South Carolina Late Woodland may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500 to 700 years (cf. Sassaman et al. 1990:14-15). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

The South Appalachian Mississippian Period (ca. A.D. 1100 to 1640) is the most elaborate level of culture attained by the native inhabitants and is followed by cultural disintegration brought about largely by European disease. The period is characterized by complicated stamped pottery, complex social organization, agriculture, and the construction of temple mounds and ceremonial centers. The earliest phases include the Savannah and Pee Dee (A.D. 1200 to 1550).

## Historic Overview

The English established the first permanent settlement in what is today South Carolina in 1670 on the west bank of the Ashley River. Like other European powers, the English were lured to the "new World" for reasons other than the acquisitions of land and promotion of agriculture. The Lords Proprietors, who owned the colony until 1719-1720, intended to discover a staple crop whose marketing would provide great wealth through the mercantile system.

By 1680 the settlers of Albermarle Point had moved their village across the bay to the tip of the peninsula formed by the Ashley and Cooper rivers — the area of modern-day Charleston.

The early settlers of the Carolina colony came from other mainland colonies, England, and the European continent. But the future of Carolina was largely directed by the large number of colonists from the English West Indies. This Caribbean connection has been discussed by Waterhouse (1975), who argues

that the Caribbean immigrants were largely from old families of economic and political prominence which formed the Barbados élite. Waterhouse observes that while elsewhere in the American colonies the early settled families were displaced from their established positions of power and economic superiority by newcomers, this did not occur in South Carolina. In Carolina:

> a relatively large proportion of those who, in the middle of the eighteenth century, were among the wealthier inhabitants, were descended from those families who had arrived in the colony during the first twenty years of its settlement (Waterhouse 1975:280).

This immigration turned out to be a significant factor in the stability and longevity of South Carolina's colonial élite. It also firmly established the foundations of slavery and cash crop plantations.

In 1682 the first three Carolina counties — Berkeley, Colleton, and Craven — were created. This original Colleton County was far larger than the area known as Colleton today and included roughly the area between the Stone and Combahee rivers. This incorporated modern-day Dorchester County, as well as Edisto and Johns islands.

There seems to be little reliable information concerning the early settlement of Colleton, although there is general agreement that one settlement grew up around Jacksonboro on the Edisto River (known at the time as Pon Pon River). Another significant settlement was Willtown, situated about 8 miles south of Jacksonboro (and today outside of Colleton County). The Round O was an area initially used for cattle raising, although by 1700 it seems that rice was being planted (The Jaeger Company 1995:10).

Cattle raising was an easy way to exploit the region's land and resources, offering a relatively secure return for very little capital investment. Few slaves were necessary to manage the herd. The mild climate of the low country made winter forage more abundant and winter shelters unnecessary. The salt marshes on the coast, useless for other purposes, provided excellent grazing and eliminated the need to provide salt licks. More interior swamps found similar vegetation and provided a constant water supply (Coon 1972; Dunbar 1961). Production of cattle, hogs, and sheep quickly outstripped local consumption and by the early eighteenth century beef and pork were principal exports of the Colony to the West Indies (Ver Steeg 1975:114-116). This allowed the ties between Carolina and the Caribbean to remain strong, and provided essential provisions to the large scale, single crop plantations.

Rice and indigo both competed for the attention of Carolina planters. Although introduced at least by the 1690s, rice did not become a significant staple crop until the early eighteenth century. At that time it not only provided the Proprietors with the economic base the mercantile system required, but it was also to form the basis of South Carolina's plantation system — slavery.

The Church Act of 1706 established two Anglican parishes in Colleton County — St. Bartholomew's and St. Paul's, with the former roughly encompassing what is today Colleton County.

Regardless of the progress of early settlement, by 1715 the Yemassee Indian initiated what was to develop into a major war that would leave the region largely uninhabited. Wallace, for example, suggests that the very low level of slave ownership in the area during the first quarter of the eighteenth century was the result of this war (Wallace 1934:I:309-310). The Jaeger Company (1995:10) notes that there were only about 379 residents in 1720, only 144 (about 38%) of whom were African American slaves.

As rice became a more important commodity during the early eighteenth century, however, the complexion of Colleton County gradually changed. South Carolina's economic development during the pre-Revolutionary War period involved a complex web of interactions between slaves, planters, and merchants. By the close of the eighteenth century some South Carolina plantations had a ratio of slaves to whites that was 27:1 (Morgan 1977). And by the end of the century over half of eastern South Carolina's white population held slaves. With slavery came, to many,

unbelievable wealth. Coclanis notes that:

> on the eve of the American Revolution, the white population of the low country was by far the richest single group in British North America. With the area's wealth based largely on the expropriation by whites of the golden rice and blue dye produced by black slaves, the Carolina low country had by 1774 reached a level of aggregate wealth greater than that in many parts of the world even today. The evolution of Charleston, the center of the low-country civilization, reflected not only the growing wealth of the area but also its spirit and soul (Coclanis 1989:7).

Only certain areas of the low country, however, were suitable for rice production. During the early years rice was grown as an upland crop, in small fields adjacent to freshwater streams where water could be easily impounded and applied to the crop (Linder 1995:v, vii). By the early 1700s planters found that upland swamps, such as those in the Round O area, were even better suited for rice, although the soils were quickly exhausted (Meriwether 1940; Sellers 1934). These upland swamps, distinct from well-drained uplands, remained the focus of Carolina rice agriculture during the entire Colonial period.

Hewatt, writing in 1779, describes the process of upland swamp rice cultivation:

> after the planter has obtained his tract of land, and built a house upon it, he then begins to clear his field of that load of wood with which the land is covered. Having cleared his field, he next surrounds it with a wooded fence, to exclude all hogs, sheep, and cattle from it. This field he plants with rice . . . year after year, until the lands are exhausted, or yield not a crop sufficient to answer his expectations. Then it is forsaken, and a fresh spot of land is cleared and planted, with is also treated in like manner, and in succession forsaken and neglected (Hewatt 1836:514).

This rather simplistic commentary failed to observe the engineering feat that upland swamp rice cultivation really was. Clearing, which alone was a monumental undertaking, was followed by the construction of dams, dikes, and trenches. By one estimate, a 500 acre rice field required 60 miles of dikes and ditches (Gunn 1976:1-16). Fields were carefully leveled to ensure that they could be completely covered by water. Rice was planted during two periods — March 10 to April 10 and June 1 to June 10 — avoiding May since vast migrations of "rice birds" passed through the state during that period and could destroy a crop. Rice was harvested in late August.

During the eighteenth century the profits to be gained from rice were extraordinary, ranging from a 12% to nearly 28% net return on the investment, well exceeding other cash crops, such as tobacco or indigo (see Coclanis 1989:141). Slavery in the Colleton area swelled, accounting for more than 82% of the area's population in 1790. Charleston was the mecca around which the economic, political, and social world of Carolina revolved. Charleston provided the essential opportunity for conspicuous consumption, a mechanism which allowed the display of wealth accumulated from the plantation system.

By the end of the eighteenth century, beginning of the nineteenth century, the rate of return on rice had been reduced, at best, to about 2%, and many years the rate of return was a staggering -3% to -7%. In 1859, just before the Civil War, the return is reported to have been -28%. As Coclanis observes:

> the economy of the South Carolina low country collapsed in the nineteenth century. Collapse did not come suddenly - many feel, for example, that the area's "golden age" lasted until about 1820 - but come it did nonetheless. By the late nineteenth century it was clear that the forces responsible for the area's

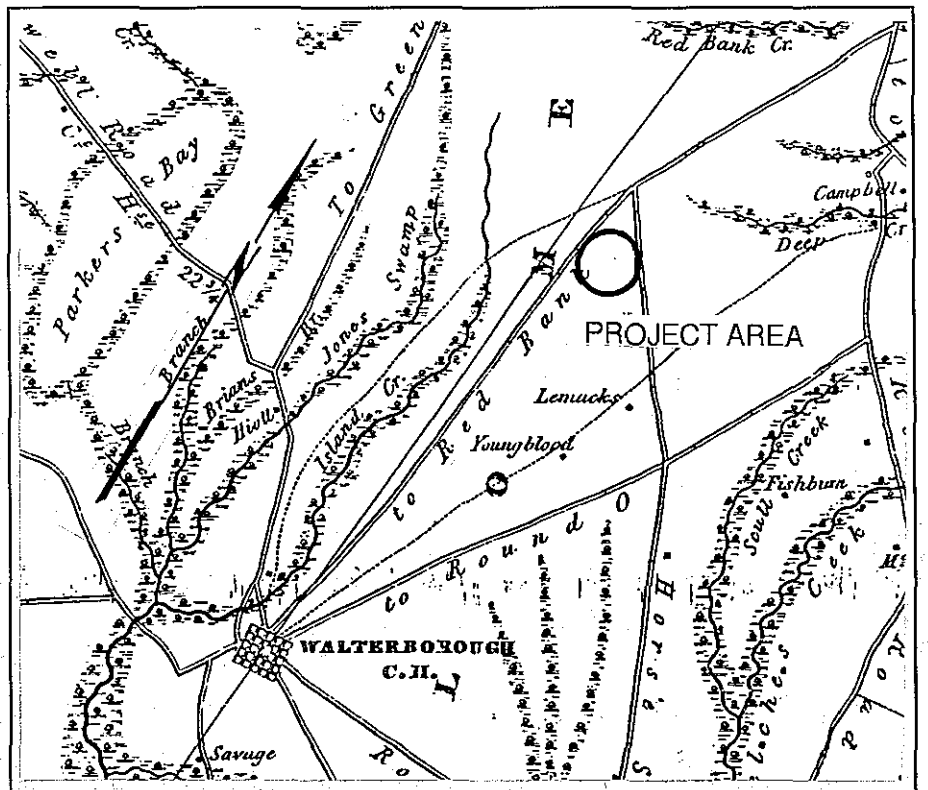

Figure 7. Mills' *Atlas* with portion of the survey area.

> earlier dynamism had been routed, the dark victory of economic stagnation virtually complete (Coclanis 1989:111).

Colleton County saw several military engagements during the American Revolution. Perhaps best known is the Battle of Parker's Ferry, where General Francis Marion and his force of about 400 men stopped the advance of superior British forces under the command of Lieutenant Colonel de Borock and forced his retreat back to Charleston (The Jaeger Company 1995:14). In early 1782 Jacksonboro served as the capital of South Carolina, hosting the General Assembly. It was during this term that South Carolina elected a new governor and approved the various Amercement and Confiscation Acts aimed against British loyalists.

After the American Revolution the economy of the Colleton area, like elsewhere in the state, was in ruins and there was a very slow recovery — largely focused once again on rice cultivation and particularly the spread of tidal cultivation. The first census of St. Bartholomew in 1790 revealed a population of 12,606, with more than 82% of those enumerated being African American slaves. Of the 538 heads of households in 1790, 311 or 58%, owned at least one slave.

The town of Walterboro was founded in 1783 by Paul and Jacob Walter and was chosen as a haven for those family members stricken with malaria. Soon, several coastal plantation owners joined them in calling Walterboro, or what was then known as simply the Ireland Creek settlement, as their summer home. By 1800, Walterboro had turned into a significant "pine-barren" resort, called so because of its wooded location and the timber fabricated cabins. It was named as the county seat of Colleton County in 1817, officially adopting the name Walterboro at this time. Not more than a decade later, the town had grown to a summer population of 900, with over 450 full-time residents. The town grew slowly but steadily through the antebellum years, catering to the same plantation owners that founded the town in the summer months. Several businesses and industries developed to support the growing community and their tourist traffic including churches, restaurants, general stores, and government buildings.

The antebellum saw continued expansion of rice and continued accumulation of wealth by many planters. In fact, by 1860 Colleton District ranked second among South Carolina's 30 districts in rice production with 22.8 million pounds being produced (The Jaeger Company 1995:20). Mills commented that the district's rice lands were very productive, "yielding

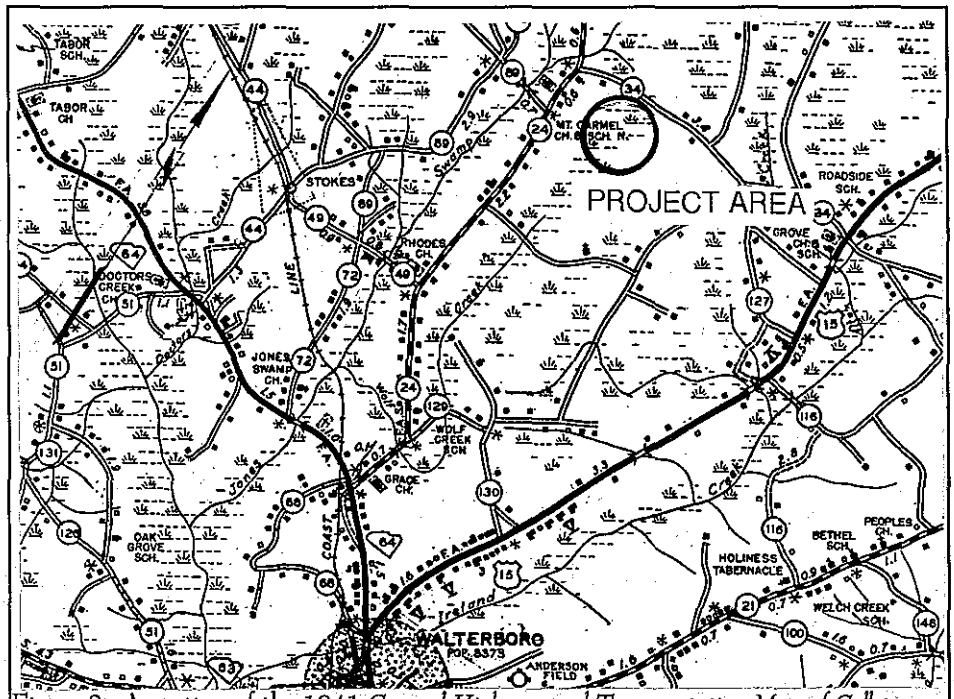


Figure 8. A portion of the 1941 *General Highway and Transportation Map of Colleton County* showing the project area.

on an average two barrels, or 1400 pounds of rice to the acre" (Mills 1972 [1826]:505). Yet, with the decline in the return offered by rice, there was an accompanied slow-down in the rise of slavery for the region (The Jaeger Company 1995:20).

Mills' *Atlas* for Colleton (Figure 7) reveals the growth of Walterboro. The road "to Red Bank" closely follows the modern course of S-21, while the road "to Round O" is today US 17A. Eberson Causeway is today the junction of S-41 and SC 64. The proposed tract, while low and swampy, is fairly removed from any identified rice lands (while Mills does note the presence of "Rice Land" further south on the west bank of the Ashepoo, none is shown in the project area), and does not seem to come very near any of Mills' subscribers.

Although rice was the dominant crop during the antebellum, it was also a major producer of sweet potatoes (ranking fifth in 1840). Cotton production gradually increased from 1840 to 1860, as did both corn and rye production — although these crops were almost exclusively found north of Walterboro, where the soils tend to be higher and somewhat drier (The Jaeger Company 1995:23).

Colleton County's location and river system gave it strategic importance throughout the Civil War. The events are briefly recounted by the architectural survey of the county (The Jaeger Company 1995:25-26) and include battles, the construction of various defenses, and the abandonment of plantation houses throughout the area. Perhaps the single greatest effect of the Civil War, however, was the loss of the labor white plantation owners had relied on to make their rice fields profitable. So after the war the county's economy — like that throughout South Carolina — was in near collapse.

The 1870 census reports that 91% of Colleton County farms were under 100 acres in size, representing the breakup of many larger tracts and development of small farms, both owner-operated and tenant-operated. The Jaeger Company (1995:28) points out that a total of 12,894.5 acres of Colleton County land was distributed by the South Carolina Land Commission — the second highest total of all South Carolina counties.

Although an effort was made to restore rice production to pre-war levels, this effort was doomed. Not only was there resistance among black laborers, but a series of devastating storms hit the South Carolina coast in 1893, 1898, 1910, and 1911. Moreover, rice production was being mechanized in states like Texas and Louisiana, providing competition that South Carolina rice growers were unprepared to meet.

A variety of alternatives were sought, for example phosphate and timber, although each produced income for a relatively few years before collapsing. The population of Walterboro increased dramatically during the Post-Reconstruction period. After the Civil War, Walterboro became a gathering place for deposed Ashepoo, Edisto and Combahee planters, growing from a population of 691 in 1880 to a booming business town and summer resort of 1,500 permanent residents in 1900. Its reputation as a peaceful, temperate vacation get-away was augmented by improved roadways and better rail accessibility. By the mid-1890s, Walterboro had the largest railway station on the line between Charleston and Savannah, bringing in rail tourists. Travelers on US Highway 17 and SC Route 30 also saw Walterboro as a convenient place to rest (Figure 8).

During the twentieth century the county weathered both the depression years and the following boom in industrial growth. Throughout timber tended to be the one consistent and even today most the county's lands are in timber. Much of the timbering in the area south of Walterboro was conducted by the Walterboro Lumber Company, with its mill located in Thayer. This company, which operated at least into the 1920s, seems to have focused on the area between the Ashepoo River and Chessey Creek (Fetters 1990:153-155). Today most of the timber land is held by Westvaco.

Like many other areas in South Carolina, farming was hard hit by the Great Depression. The Jaeger Company (1995:35) notes that the number of Colleton farms dropped from 4,545 in 1910 to 2,944 by 1950, although this largely represents smaller farms being amalgamated (farm acreage dropped less, from 471,013 to 411,011 acres).During this same period, however, tenancy was reduced by about 50%, with the number of tenants dropping from 1,251 to 665.

## Previous Investigations

Colleton County has received relatively little archaeological attention. In fact, when Derting and his colleagues prepared the bibliography of archaeological literature in the early 1990s, there were only 24 listings for Colleton County (Derting et al. 1991:196-201). Of these 19, or nearly 80%, were associated with some sort of compliance study and 17 of the 19 were associated with highways construction activities. Wedged between far more prosperous counties to the northeast and southwest, Colleton had received relatively little investigation. That is still largely the case today. There are no previously recorded archaeological sites in the APE.

The most recent large-scale investigation in Colleton is the 1995 architectural and historical survey of the county by The Jaeger Company (1995). This study, conducted over three years, identified 1,288 sites

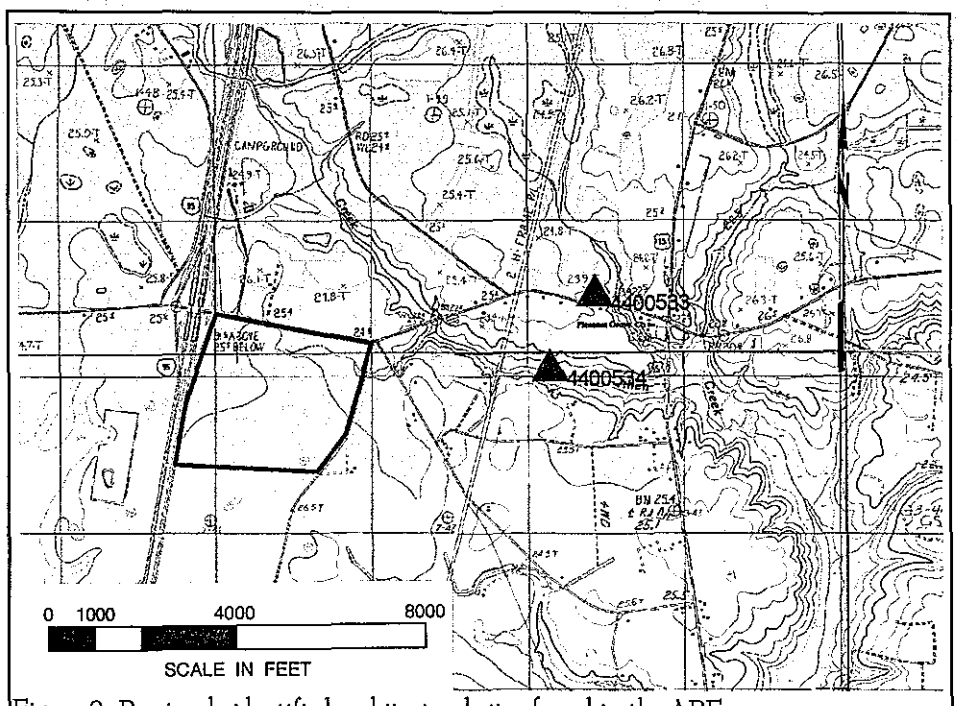

Figure 9. Previously identified architectural sites found in the APE.

for the county.

Although the previous county wide survey (The Jaeger Company 1995) was of considerable use, we found that often it failed to provide much detail concerning non-architectural features such as cemeteries and rice fields. The latter, in particular, were often dismissed with general observations such as "the rice fields have not been maintained and now contain successive vegetation" (35602690).

Two previously identified sites were found recorded within the APE (Figure 9). The first, 440533 is the ca. 1907 Gatch House, while 440534 is the Ireland Creek Cemetery, dating to about 1860. Both of these sites have been previously evaluated by the State Historic Preservation Office as not eligible.

# RESEARCH METHODS AND FINDINGS

## Archaeological Field Methods and Findings

The initially proposed field techniques involved the placement of shovel tests at 100-foot intervals along transects laid out at 100-foot intervals (Figures 10 and 11). All soil would be screened through ¼-inch mesh, with each test numbered sequentially by transect. Each test would measure about 1.0 foot square and would normally be taken to a depth of at least 1.0 foot or until subsoil was encountered. In the areas with wetlands with standing water or areas of steep slopes, no shovel tests would be excavated. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of two or more artifacts from either surface survey or shovel tests within a 25 foot area) be identified by shovel testing, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 25 foot intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators. Sites which appeared to be eligible or potentially eligible for inclusion on the National Register of Historic Places would be recorded using a Garmin GPS 12XL rover using a Garmin 21 Beacon Receiver. We have found that this combination, in this part of South Carolina, is capable of providing potential horizontal errors of 6 m or less.

A series of 30 transects were laid out running east to west from Three Mile Road to I-95 along a dirt road created by Westvaco and 6 transects from east to west along S-34 and shovel testing to the south (Figure 11). A total of 848 shovel tests were excavated in the project area. Almost all of the shovel tests in the fields revealed soils of Rains sandy loams which have an Ap horizon of very dark gray (10YR3/1) sandy loam ranging from 0 to 0.4 foot in depth over a light brownish gray (10YR6/2) sandy loam. This generally overlaid a B horizon of gray (10YR5/1) sandy clay loam subsoil.

Figure 10. View of Westvaco dirt road.

Also found in abundance were Lynchburg loamy fine sands. Less common were

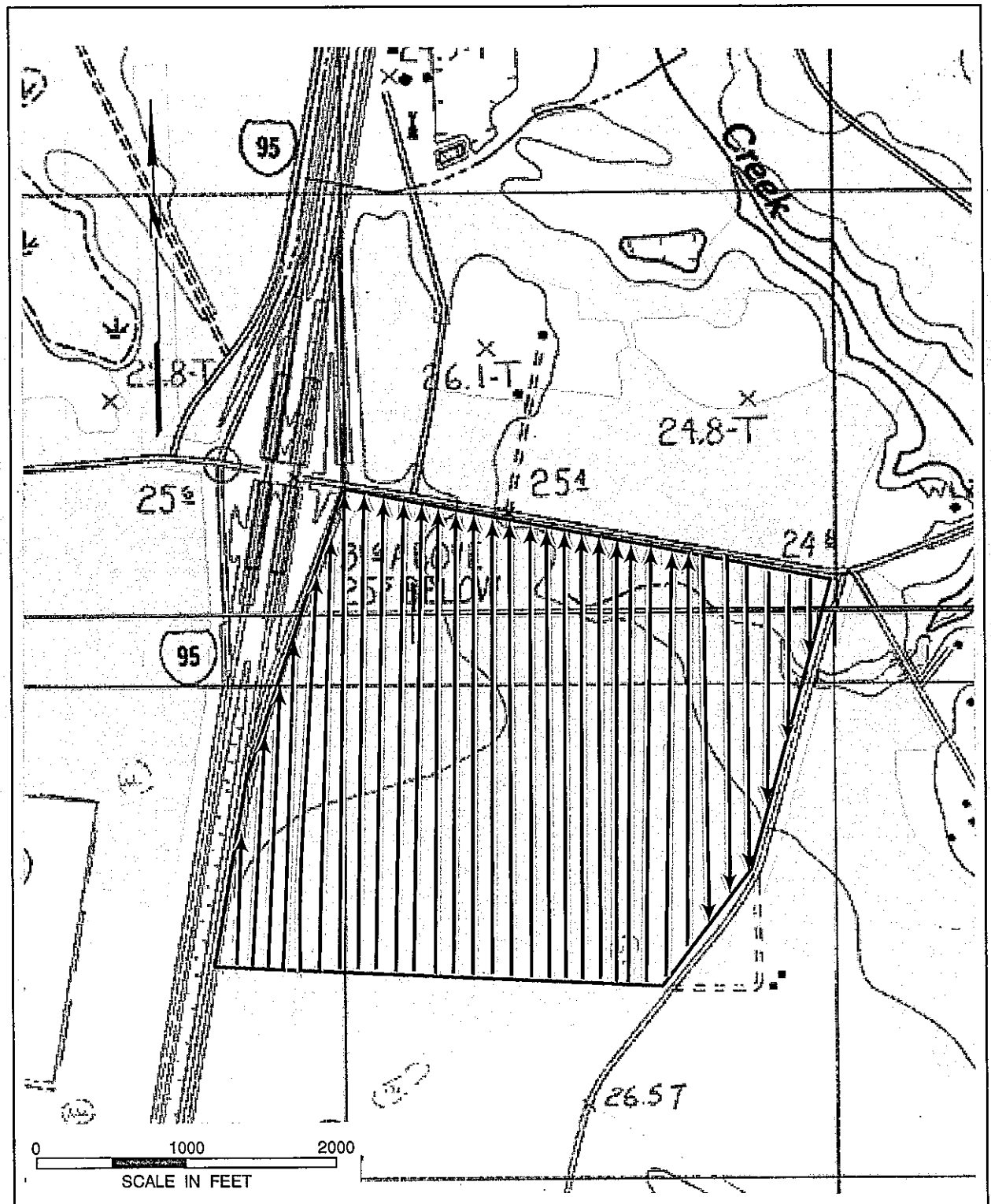


Figure 11. Transects in the survey tract.

Paxville and Ocilla soils which occur in low areas. These soils exhibited dark, reduced profiles. A very few areas of Goldsboro soils were also encountered during the shovel testing.

Sites would be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the State Historic Preservation Officer at the South Carolina Department of Archives and History.

Analysis of collections would follow professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains.

Nevertheless, the archaeological survey of the 200 acre tract failed to identify any archaeological remains. This is most likely the result of the low, poorly drained soils and distance to any sizeable creek or water source.

## Architectural Survey and Findings

As previously discussed, we elected to use a 1.0 mile area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects which appeared to have been constructed before 1950 and which retained their integrity. Those which have undergone such extensive modifications to preclude their eligibility were not recorded.

For each identified resource an architectural survey form would be completed and at least two representative photographs would be taken. Permanent control numbers would be assigned by the S.C. Department of Archives and History at the conclusion of the study. The site forms for the resources identified during this study would then be submitted to the South Carolina State Historic Preservation Office.

The survey was conducted by driving the public roads (typically county or state secondary roads) in the APE. As was previously discussed, there were no previously recorded National Register sites in the APE, but two historic structures were previously recorded for the APE. Structure 440533 is a ca. 1907 house known as the Gatch House and 440534 is the Ireland Creek Cemetery dating to about 1860. Both of these historical sites have been determined not eligible for inclusion on the National Register and our review concurs with this previous assessment.

# SUMMARY AND RECOMMENDATIONS

This study involved the examination of a 200 acre tract situated in eastern Colleton County, South Carolina. The tract is proposed to be used by A.M. Jacobs, Inc. to construct an industrial park. This report, conducted for A.M. Jacobs, Inc., provides the results of that investigation and is intended to examine the archaeological sites found on the proposed tract, as well as historic sites which are within a 1.0 mile area of potential effects (APE). This report is intended to assist A.M. Jacobs, Inc. and its clients comply with their historic preservation responsibilities.

The proposed work will result in extensive clearing, grubbing, grading, as well as construction activities. It is likely to destroy any archaeological sites which may be present on the survey tract. The work may also modify the visual surroundings of any historic properties in the APE.

The surrounding areas are still fairly rural with several small non-historic homes in direct view of the project area. The survey tract itself is mostly woods and wetlands, but has clearer areas with dry, tall grasses interspersed between the wooded and wetland areas. Shovel tests were conducted at 100 foot intervals on transects spaced 100 feet apart. Some areas were not tested using shovel tests due to high standing water, but instead were surveyed using a pedestrian walk over.

As a result of this investigation, no archaeological sites were uncovered. In addition to the archaeological investigations, a survey of historic sites was also conducted within the 1.0 mile APE. Driving the APE confirmed the original finding of no potential National Register sites in the area.

It is possible that archaeological remains may be encountered in the area during construction. As always, the utility's contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

# SOURCES CITED


Anderson, David G.

1979 *Excavations at Four Fall Line Sites: The Southeastern Beltway Project.* Commonwealth Associates, Inc., Jacksonville, Michigan. Submitted to the South Carolina Department of Highways and Public Transportation, Columbia.

Anderson, David G., Charles E. Cantley, and A. Lee Novick

1982 *The Mattassee Lake Sites: Archaeological Investigations Along the Lower Santee River in the Coastal Plain of South Carolina.* Commonwealth Associates, Jackson, Michigan.

Barry, John M.

1980 *Natural Vegetation of South Carolina.* University of South Carolina Press, Columbia.

Blanton, Dennis B., Christopher T. Espenshade, and Paul E. Brockington, Jr.

1986 *An Archaeological Study of 38SU83: A Yadkin Phase Site in the Upper Coastal Plain of South Carolina.* Garrow and Associates, Inc., Atlanta.

Braun, Lucy E.

1982 *Deciduous Forests of Eastern North America.* Reprinted. The Free Press, New York. Originally published 1950, Macmillan Publishing, New York.

Cable, John

1991 *Archaeological Test Excavations on the Northeastern Perimeter of the Buck Hall Site (38CH644), Francis Marion National Forest, South Carolina.* New South Associates, Irmo, South Carolina.

Caldwell, Joseph R.

1958 *Trend and Tradition in the Prehistory of the Eastern United States.* Memoirs of the American Anthropological Association 88.

Calhoun, Jeanne

1983 *The Scourging Wrath of God: Early Hurricanes in Charleston, 1700-1804.* Leaflet No. 29. The Charleston Museum, Charleston, South Carolina.

Chandler, Andrew W.

1994 Letter to Dr. C.W. Wimberly, Jr., August 29, 1994. S.C. State Historic Preservation Office, Columbia.

1995 Colleton County Survey National Register Evaluation: Phases 1-III. In *Colleton County Historical and Architectural Inventory, 1992-1995, Colleton County, South Carolian.* The Jaeger Company, n.p.

Coclanis, Peter A.

1989 *The Shadow of a Dream: Economic Life and Death in the South Carolina Low Country 1670-1920.* Oxford University Press, New York.

1993 Introduction. In *Seed from Madagascar*, by Duncan Clinch Heyward, pp. ix-l. University of South Carolina Press, Columbia.

Coe, Joffre
1964 *The Formative Cultures of the Carolina Piedmont*. Transactions of the American Philosophical Society 54(5).

Coon, David L.
1972 *The Development of Market Agriculture in South Carolina*. Ph.D. dissertation, University of Illinois. University Microfilms, Ann Arbor.

Dunbar, Gary S.
1961 Colonial Carolina Cowpens. *Agricultural History* 35:125-130.

Derting, Keith M., Sharon L. Pekrul, and Charles J. Rinehart
1991 *A Comprehensive Bibliography of South Carolina Archaeology*. Research Manuscript 211. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Ferguson, Leland G.
1971 *South Appalachian Mississippian*. Ph.D. dissertation, University of North Carolina, Chapel Hill. University Microfilms, Ann Arbor, Michigan.

Fetters, Thomas
1990 *LoggingRailroads of South Carolina.* Heimburger House Publishing Co., Forest Park, Illinois.

Fishburne, Lucius G., compiler.
1950 *Plantation Notes - St. Bartholomews Parish*. Begun 1938, completed 1950. Colleton County Memorial Library, Local History Collection, Walterboro.

Goodyear, Albert C., John H. House, and Neal W. Ackerly
1979 *Laurens-Anderson: An Archaeological Study of the Inter-Riverine Piedmont*. Anthropological Studies 4, Occasional Papers of the Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Gunn, Victoria Reeves
1976 Hofwyl Plantation. Ms. on file, Georgia Department of Natural Resources, Atlanta.

Hanson, Glen T., Jr.
1982 The Analysis of Late Archaic-Early Woodland Adaptive Change Along the Middle Savannah River: A Proposed Study. *South Carolina Institute of Archaeology and Anthropology Notebook* 14:1-38.

Hewatt, Alexander D.D.
1836 An Historical Account of the Rise and Progress of the Colonies of South Carolina and Georgia (1779). In *Historical Collections of South Carolina*, edited by B.R. Carroll, pp. lxix-533. Harper & Brothers, New York.

Hilliard, Sam B.
1984 *Atlas of Antebellum Southern Agriculture*. Louisiana State University Press, Baton Rouge.

Jaeger Company, The
1995 *Colleton County Historical and Architectural Inventory, 1992-1995, Colleton County, South Carolian*. The Jaeger Company, n.p.

King, Thomas F.
1998 *Cultural Resource Laws and Practice: An Introductory Guide*. Altamira Press, Walnut Creek, California.

Linder, Suzanne C.
1995 *Historical Atlas of the Rice Plantations of the ACE River Basin — 1860*. South Carolina Department of

Archives and History, Columbia.

Mathews, Maurice
1954 A Contemporary View of Carolina in 1680. *South Carolina Historical and Genealogical Magazine* 55:153-159.

Mathews, Thomas D., Frank W. Stapor, Jr., Charles R. Richter, John V. Miglarese, Michael D. McKenzie, and Lee R. Barclay
1980 *Ecological Characterization of the Sea Island Coastal Region of South Carolina and Georgia, vol. 1*. Office of Biological Services, Fish and Wildlife Service, Washington, D.C.

Meriwether, Robert L.
1940 *The Expansion of South Carolina 1729-1765*. Southern Publishers, Kingsport, Tennessee.

Michie, James
1977 *The Late Pleistocene Human Occupation of South Carolina*. Unpublished Honor's Thesis, Department of Anthropology, University of South Carolina, Columbia.

Mills, Robert
1972 [1826] *Statistics of South Carolina*. Reprinted. The Reprint Press, Spartanburg, South Carolina.

Morgan, Phillip D.
1977 *The Development of Slave Culture in Eighteenth Century Plantation America*. Unpublished Ph.D. dissertation, University College, London.

Oliver, Billy L.
1981 *The Piedmont Tradition: Refinement of the Savannah River Stemmed Point Type*. Unpublished Master's thesis, Department of Anthropology, University of North Carolina, Chapel Hill.

Pasquill, Robert G.
1983 An Archaeological Survey of Selected Timber Stands in Compartment 112, Witherbee District, Francis Marion National Forest. Ms. on file, U.S. Forest Service, McClellanville, South Carolina.

1984 An Archaeological Survey of Selected Timber Stands in Compartment 111 and 112, Witherbee District, Francis Marion National Forest. Ms. on file, U.S. Forest Service, McClellanville, South Carolina.

Phelps, David A.
1983 Archaeology of the North Carolina Coast and Coastal Plain: Problems and Hypotheses. In *The Prehistory of North Carolina: An Archaeological Symposium*, edited by Mark A. Mathis and Jeffrey J. Crow, pp. 1-52. North Carolina Division of Archives and History, Department of Cultural Resources, Raleigh.

Price, Cynthia
1979 *19th Century Ceramics in the Eastern Ozark Boarder Region*. Monograph Series 1. Center for Archaeological Research, Southwest Missouri University, Springfield.

Ryan, Thomas M.
1972 *Archaeological Survey of the Columbia Zoological Park, Richland and Lexington Counties, South Carolina*. Research Manuscript Series 37. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Sassaman, Kenneth E., Mark J. Brooks, Glen T.

Hanson, and David G. Anderson
1990 *Native American Prehistory of the Middle Savannah River Valley*. Savannah River Archaeological Research Papers 1. Occasional Papers of the Savannah River Archaeological Research Program, South Carolina Institute of Archaeology and Anthropology, University of South Carolina.

Saunders, Katherine and Jonathan Poston
1998 Draft Cooper River National Register Historic District Nomination. Ms. on file, S.C. Department of Archives and History, Columbia.

Service, E.M.
1966 *The Hunters*. Prentice-Hall, Englewood Cliffs.

Sirmans, M. Eugene
1966 *Colonial South Carolina: A Political History 1663-1763*. University of North Carolina Press, Chapel Hill.

South, Stanley A.
1976 An Archaeological Survey of Southeastern North Carolina. *South Carolina Institute of Archaeology and Anthropology Notebook* 93.

Stoltman, James B.
1974 *Groton Plantation: An Archaeological Study of a South Carolina Locality*. Monographs of the Peabody Museum 1, Harvard University, Cambridge.

Stuck, Warren M.
1982 *Soil Survey of Colleton County, South Carolina*. U.S.D.A., Soil Conservation Service, Washington, D.C.

Taylor, Richard L. (editor)
1984 *Cultural Resources Survey of the Proposed Pee Dee Electric Generating Facility in Florence County, South Carolina*. Commonwealth Associates, Jackson, Michigan.

Townsend, Jan, John H. Sprinkle, Jr., and John Knoerl
1993 *Guidelines for Evaluating and Registering Historical Archaeological Sites and Districts*. National Register Bulletin 36. National Park Service, Washington, D.C.

Trinkley, Michael
1980a *Additional Investigations at 38LX5*. South Carolina Department of Highways and Public Transportation, Columbia.

1980b *Investigation of the Woodland Period along the South Carolina Coast*. Ph.D. dissertation. Department of Anthropology, University of North Carolina, Chapel Hill.

1990 *An Archaeological Context for the South Carolina Woodland Period*. Chicora Foundation Research Series 22. Chicora Foundation, Inc., Columbia, S.C.

Trinkley, Michael, Debi Hacker, and Natalie Adams
1993 *Life in the Pee Dee: Prehistoric and Historic Research on the Roche Carolina Tract, Florence County, South Carolina*. Research Series 39. Chicora Foundation, Inc., Columbia.

1995 *A Heritage Resources Management Plan for Greenville County, South Carolina: Our Gift to the Future*. Research Series 46. Chicora Foundation, Inc., Columbia.

Ver Steeg, Clarence L.
1975 *Origins of a Southern Mosaic*. University of Georgia Press, Athens.

Wallace, Duncan David
1934 *The History of South Carolina*. 4 vols. The American Historical Society, New York.

Walthall, John A.
1980 *Prehistoric Indians of the Southeast: Archaeology of Alabama*. University of Alabama Press, University.

Ward, Trawick
1978 *The Archaeology of Whites Creek, Marlboro County, South Carolina*. Research Laboratories of Anthropology, University of North Carolina, Chapel Hill.

1983 Whites Creek: The Second Time Around. *South Carolina Antiquities* 15:63-65.

Waterhouse, Richard
1975 England, the Caribbean, and the Settlement of Carolina. *Journal of American Studies* 9:259-281.

Williams, Stephen B., editor
1968 *The Waring Papers: The Collected Works of Antonio J. Waring, Jr.* Papers of the Peabody Museum of Archaeology and Ethnology 58.

Wood, Peter
1974 *Black Majority*. W.W. Norton, New York.